PA-SHT REV 6

SYMBOL LIST

———	DARK LINE INDICATES CONDUIT OR EQUIPMENT TO BE INSTALLED.
———	LIGHT LINE INDICATES EXISTING CONDUIT OR EQUIPMENT TO REMAIN.
———	CONDUIT RUN EXPOSED OR CONCEALED
≡≡≡	5 CONDUITS, RUNNING 2 TIER : 3 CONDUITS OVER 2
●———	CONDUIT TURNING DOWN
o———	CONDUIT TURNING UP
——//——	CONDUIT TO BE REMOVED
——SP——	EXISTING SPRINKLER MAIN TO REMAIN
——D——	EXISTING DRAIN PIPING TO REMAIN
——CW——	EXISTING CONDENSER WATER PIPING
(M)	EXISTING CURRENT TRANSFORMER & METER TO REMAIN
==:==	STRUCTURAL TRUSS
[J]	JUNCTION BOX

NOTES:

1. CONFIRM ALL EXISTING FIELD CONDITIONS PRIOR TO INSTALLATION.
2. PROVIDE SERVICES OF FACTORY ENGINEERS TO FIELD VERIFY EXISTING FIELD CONDITIONS PRIOR TO FABRICATION OF BUSWAYS.
3. BUSDUCT SCHEDULE FOR INFORMATION ONLY. ACTUAL DIMENSIONS OF COMPONENTS TO BE FIELD VERIFIED. PROVIDE SPECIAL LENGHTS AND SIZES AS PER FIELD CONDITIONS.
4. TRACE ALL BRANCH CIRCUITING AND FEEDERS, IDENTIFIED TO BE REROUTED, DUE TO INSTALLATION OF BUSWAY IN ORDER TO IDENTIFY LOADS.
5. ALL BUSWAY REPLACEMENTS SHALL BE PERFORMED AFTER NORMAL WORK HOURS.
6. PROCEDURES FOR NOTIFYING THE PORT AUTHORITY ENGINEER OF LOADS, PENDING POWER OUTAGES AND THE HOURS THAT WORK IS TO BE PERFORMED SHALL BE AS INDICATED IN DIVISION ONE, GENERAL PROVISIONS, SUBSECTION "CONDITIONS AND PRECAUTIONS".
7. ALL COPPER BUSWAYS SHALL BE SINGLE BUS BAR PER PHASE, 480/277V, 3ø,4W+G, 2000A.
8. REMOVE EXISTING BUSWAYS BETWEEN FLOORS AS INDICATED & INSTALL REPLACEMENT ALUMMUM AND OR COPPER BUSWAY WITH INTEGRAL FIRESTOPS AS SHOWN. COORDINATE LENGTH IN FIELD.
9. FURNISH & INSTALL BUSWAYS SUPPORTS AT FLOOR LEVEL FOR COPPER BUSWAYS SUPPORTS TO BE MOUNTED TO EXISTING CURBS.
10. ALL CABLE TAP BOXES SHALL BE SUPPLIED WITH TWO REMOVABLE ACCESS COVERS (BOTTOM AND SIDE).
11. SUBMIT FULLY DIMENSIONED SHOP DRAWINGS INDICATING ALL ELEVATIONS, DIMENSIONS, AND ROUTING OF ALL BUSWAYS, CONDUITS, PULLBOXES, ETC. AND ALL ASSOCIATED ELECTRICAL WORK.
12. ALL CONDUIT SHALL BE RIGID STEEL, GALVANIZED, TYPE GSC, SIZE AS INDICATED. ALL CONDUCTORS SHALL BE COPPER, 600 VOLT, TYPE XHHW, UNLESS OTHERWISE NOTED.
13. CLEAN AND REFURBISH ALL SECTION OF EXISTING BUSWAY THAT WILL BE RE-INSTALLED IN ELECTRIC CLOSET OR OTHER AREA. ALL REMOVED, UNUSED, BUSWAYS SHALL BE TURNED OVER TO THE PORT AUTHORITY.
14. ALL REPLACEMENT 1600A, ALUMINUM, PAIRED PHASE BUSDUCT TO MATCH EXISTING, FURNISH LENGTH AS REQUIRED.
15. EXISTING LIGHT FIXTURES, WHICH ARE REQUIRED TO BE RELOCATED, DUE TO A CONFLICT WITH THE INSTALLATION OF THE 2000A BUSWAY AND/OR CONDUITS SHALL BE INCLUDED IN SCOPE OF PROJECT AS A COST ITEM.
16. COORDINATE METHOD OF INSTALLATION OF CONDUITS IN PLENUM SHAFT WITH THE ENGINEER. THE ENGINEER MUST APPROVE INSTALLATION METHOD PRIOR TO WORK (i.e. SCAFFOLDING, ETC)
17. ALL BUSWAYS, INSTALLED IN ELECTRIC CLOSETS, MUST BE PROVIDED WITH A MINIMUM OF THREE (3) PLUG IN LOCATIONS FOR 225 AMP FRAME CIRCUIT BREAKER INSTALLATION.
18. ALL COPPER, 2000A BUSWAYS TO BE SUPPLIED WITH A FULL SIZE COPPER GROUND BUS.
19. REFER TO ARCHITECTURAL DRAWINGS FOR FIRESTOPPING OF BUSWAYS AT FLOORS AND PARTITIONS.
20. COORDINATE INSTALLATION OF ACCESS DOORS IN ELEVATOR SHAFT WALLS WITH THE PORT AUTHORITY.
21. TEST ALL BUSWAYS, BUSWAY CONNECTIONS, AND ALL CONDUCTORS AS PER MANUFACTURERS RECOMMENDATIONS.

BUSWAY SCHEDULE (SEE NOTE #3)

TYPE	MODEL NUMBER	DESCRIPTION
A	SQUARE 'D' I-LINE BUSWAY #CF2520G-LFM13 OR APPROVED EQUIVALENT	FLATWISE ELBOW
B	SQUARE 'D' I-LINE BUSWAY #CF2520G-OF OR APPROVED EQUIVALENT	OFFSET FLATWISE ELBOW
C	SQUARE 'D' I-LINE BUSWAY #CF2520G-LEM11 OR APPROVED EQUIVALENT	EDGEWISE ELBOW
D	SQUARE 'D' I-LINE BUSWAY #CF2520G-SERIES OR APPROVED EQUIVALENT	SPECIAL OFFSET CABLE TAP BOX END OR SIDE ENTRANCE AS REQUIRED.
E	NOT USED	-
F	SQUARE 'D' I-LINE BUSWAY #CF2520G OR APPROVED EQUIVALENT	FEEDER BUSWAY
G	SQUARE 'D' I-LINE BUSWAY #CF2520G-TFM13 OR APPROVED EQUIVALENT	TEE FITTING
H	SQUARE 'D' I-LINE BUSWAY #CF2520G OR APPROVED EQUIVALENT	PLUG IN BUSWAY
I	NOT USED	-
J	SQUARE 'D' I-LINE BUSWAY #CF2520G-OE OR APPROVED EQUIVALENT	OFFSET EDGEWISE ELBOW
K	SQUARE 'D' I-LINE BUSWAY #CF2520G-DL(R) OR APPROVED EQUIVALENT	DOUBLE ELBOW

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OF NY & NJ

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Engineering Department
Design Division

The World Trade Center
Electrical/HVAC Upgrade Program

Title

LOW VOLTAGE DISTRIBUTION

ONE & TWO W.T.C.

ELECTRICAL

SYMBOL LIST, GENERAL NOTES, & DETAIL DRAWING

CJ/CADD	MW/CADD	FJL
Designed by	Drawn by	Checked by

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